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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,954	01/05/2000	JONATHAN LEE SULLIVAN		9970

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EXAMINER
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PEREZ GUTIERREZ, RAFAEL

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/477,954

Applicant(s)

Sullivan

Examiner

Rafael Perez-Gutierrez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-10 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/26/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This Action is in response to Applicant's amendment filed on August 26, 2004. **Claims 3-14** are still pending in the present application. **This Action is made FINAL.**

#### ***Drawings***

2. The drawings are objected to because **figure 4** is included but has not described or even mentioned in the specification. Although the Examiner acknowledges Applicant's request in the remarks to delete figure 4 from the application file, such request must be submitted formally as part of the amendment portion of the response for appropriate processing by the Legal Instrument Examiner (LIE). Therefore, the Examiner respectfully requests the Applicant to formally submit said request in response to the present Office Action.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 5-7** are rejected under 35 U.S.C. 102(b) as being anticipated by **Inubushi et al.** (U.S. Patent # 5,109,539), as applied in the previous Office Action.

Consider **claim 5**, Inubushi et al. clearly show and disclose a portable radio telephone

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(wireless communication) device (figures 4-6), comprising:

a housing 1 (figures 4 and 6 and column 1 lines 31-34);

a transceiver circuit disposed within said housing 1 (not shown but inherent since a telephone conversation can be carried out with the device) (column 1 lines 45-51);

an internal antenna 10 disposed within said housing 1 (figures 4 and 5 and column 1 lines 36-39); and

an external, retractable antenna 8 movably mounted on said internal antenna 10 and being movable between a retracted position and an extended position with respect thereto (clearly shown in the front view of figure 4 and the right side view of figure 5, and column 1 lines 33-39);

said internal antenna 10 being in circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said retracted position (column 1 lines 36-44);

said internal antenna 10 being out of circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said extended position (column 1 lines 45-49);

said external antenna 8 being in circuit with said transceiver circuit (inherent) when in its said extended position (column 1 lines 45-49); and

said external antenna 8 being out of circuit with said transceiver circuit (inherent) when in its said retracted position (column 1 lines 36-44).

Consider **claim 6**, and **as applied to claim 5 above**, Inubushi et al. further show and disclose a change-over switch 11 (switching mechanism) (figure 5) that selectively connects either said external antenna 8 or said internal antenna 10 to said transceiver circuit (inherent)

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(column 1 lines 36-49).

Consider **claim 7**, and **as applied to claim 5 above**, Inubushi et al. also disclose that said internal and external antennas 10, 8 are electrically disconnected from one another at all times (figures 5 and 6 and column 1 lines 34-36 and 40-49).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 3, 4, 8, and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inubushi et al. (U.S. Patent # 5,109,539)** in view of **Egashira (U.S. Patent # 4,862,182)**, both as applied in the previous Office Action.

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Consider **claims 3, 4, 8, and 9, and as applied to claims 5-7 above**, Inubushi et al. clearly show and disclose the claimed invention except a remote RF port, provided in said housing, which is mechanically connected to said internal antenna 10.

Egashira clearly shows and discloses a portable radiotelephone comprising, among other elements, a conductive tube 9 (remote RF port) (figures 1, 2a, and 2b), provided in the housing of said portable radiotelephone, which is mechanically connected to sub-antenna element 10 (internal antenna) to allow reception of call signals from calling parties (figures 1, 2a, and 2b and column 3 line 20 - column 4 line 19).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the conductive tube 9 (remote RF port) taught by Egashira into the device taught by Inubushi et al. for the purpose of enhancing the reception of calling signals.

6. **Claims 10, 12, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inubushi et al. (U.S. Patent # 5,109,539)** in view of well known prior art (MPEP 2144.03) as applied in the previous Office Action.

Consider **claim 10**, Inubushi et al. clearly show and disclose a portable radio telephone (wireless communication) device (figures 4-6), comprising:

a housing 1 including a front housing member and a back housing member, said front and back housing member having upper and lower ends (figures 4-6 and column 1 lines 31-34);

an internal antenna 10 positioned in said housing 1 adjacent said upper end of said back

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housing member (figures 4 and 5 and column 1 lines 36-39); and

an external, retractable antenna 8 movably mounted on said internal antenna 10 and being movable between a retracted position and an extended position with respect thereto (clearly shown in the front view of figure 4 and the right side view of figure 5, and column 1 lines 33-39);

said internal antenna 10 being in circuit with a transceiver circuit (inherent) when said external antenna 8 is in its said retracted position (column 1 lines 36-44);

said internal antenna 10 being out of circuit with said transceiver circuit (inherent) when said external antenna 8 is in its said extended position (column 1 lines 45-49);

said external antenna 8 being in circuit with said transceiver circuit (inherent) when in its said extended position (column 1 lines 45-49); and

said external antenna 8 being out of circuit with said transceiver circuit (inherent) when in its said retracted position (column 1 lines 36-44).

However, Inubushi et al. do not specifically disclose that said transceiver circuit is in a printed circuit board (PCB) positioned in said housing 1 adjacent said front housing member.

Nonetheless, the Examiner takes Official Notice that it is notoriously well known in the art to place transceiver circuitry in a PCB positioned in a front portion of the housing of a wireless device for enhanced operation.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to slightly modify the device of Inubushi et al. with well known teachings in the art in order to place said transceiver circuit is in a printed circuit board (PCB)

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positioned in said housing 1 adjacent said front housing member for enhanced operation.

Consider **claim 12**, and **as applied to claim 10 above**, Inubushi et al. further show and disclose a change-over switch 11 (switching mechanism) (figure 5) that selectively connects either said external antenna 8 or said internal antenna 10 to said transceiver circuit (inherent) (column 1 lines 36-49).

Consider **claim 13**, and **as applied to claim 10 above**, Inubushi et al. also disclose that said internal and external antennas 10, 8 are electrically disconnected from one another at all times (figures 5 and 6 and column 1 lines 34-36 and 40-49).

7. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Inubushi et al.** (U.S. Patent # 5,109,539) in view of well known prior art (MPEP 2144.03), **as applied to claim 10 above**, and further in view of Egashira (U.S. Patent # 4,862,182), as applied in the previous Office Action.

Consider **claim 14**, and **as applied to claim 10 above**, Inubushi et al., as modified above, clearly show and disclose the claimed invention except a remote RF port which is mechanically connected to said internal antenna 10.

Egashira clearly shows and discloses a portable radiotelephone comprising, among other elements, a conductive tube 9 (remote RF port) (figures 1, 2a, and 2b), provided in the housing of said portable radiotelephone, which is mechanically connected to sub-antenna element 10 (internal antenna) to allow reception of call signals from calling parties (figures 1, 2a, and 2b and column 3 line 20 - column 4 line 19).

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the conductive tube 9 (remote RF port) taught by Egashira into the modified device taught by Inubushi et al. for the purpose of enhancing the reception of calling signals.

***Allowable Subject Matter***

8. **Claim 11** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims as well as any corrections to the objections made above.

***Response to Arguments***

9. Applicant's arguments filed on August 26, 2004 have been fully considered but they are not persuasive.

Regarding **claims 5-7, 10, 12, and 13**, Applicant argues, on pages 7 and 8 of the remarks, that Inubushi et al. do not disclose, teach, or suggest "an external, retractable antenna movably mounted on said internal antenna" because Inubushi et al. state that "element 9 is a member for mounting the external antenna 8 to the housing and electrically connecting it thereto".

The Examiner respectfully disagrees with Applicant's argument because the current claim language is broad enough to be met by figures 4 and 5 of Inubushi et al.. Even though

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Inubushi et al. state that element 9 is a member for mounting the external antenna 8 to the housing and electrically connecting it thereto, figures 4 and 5 of Inubushi et al. clearly show that element 9 is mounted or is part of the internal antenna 10 and that the external, retractable antenna 8 pass through (i.e., movable) element 9 and the internal antenna 10 during insertion and extraction. Based on these showings, Inubushi et al. meet the claimed limitation of the external, retractable antenna movably mounted on said internal antenna.

Regarding **claims 3, 4, 8, 9, and 14**, Applicant argues, on pages 7 and 8 of the remarks, that since the conductive tube 9 in Egashira is part of the antenna retaining mechanism, it cannot be a remote RF port.

The Examiner respectfully disagrees with Applicant's argument because Egashira clearly discloses that when the main antenna element 1 (external, retractable antenna) is inside the case (i.e., retracted), the sub-antenna element 10 (internal antenna) is in contact with the conductive tube 9 to allow a call signal arriving from a calling party to be received by the sub-antenna element 10 (internal antenna) (see figures 1, 2a, and 2b, column 3 lines 19-35, and column 3 lines 54 - column 4 line 19). It is clear from Egashira's description that the conductive tube 9 functions as the claimed remote RF port that is mechanically connected, by the retraction of the main antenna element 1 (external, retractable antenna), to the sub-antenna element 10 (internal antenna) to allow reception of a call signal.

Additionally, Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of the fact noticed (i.e., that is notoriously well known in the art to place transceiver circuitry in a printed circuit board (PCB)

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positioned in a front portion of the housing of a wireless device for enhanced operation).

Consequently, in view of the above reasons and having addressed each of Applicant's argument, the previous rejection is maintained and made FINAL by the Examiner.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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**Hand-delivered responses** should be brought to

Crystal Park II  
2021 Crystal Drive  
Arlington, VA 22202  
Sixth Floor (Receptionist)

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (703) 308-8996. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700 or call customer service at (703) 306-0377.

  
Rafael Perez-Gutierrez

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R.P.G./rpg

**RAFAEL PEREZ-GUTIERREZ**  
**PATENT EXAMINER**

January 5, 2005